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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/215,630	12/16/1998	JANE JIN	CISCO-0650	7147

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EXAMINER	
TRAN, PHUC H	

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 12/18/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/215,630	JIN ET AL.	
	Examiner	Art Unit	
	PHUC H TRAN	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 October 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 12-22* is/are rejected.

7)☒ Claim(s) *9-11 and 23-30* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-8, 12-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (U.s. Patent No. 6119160) in view of Ayyagari et al. (U.S. Patent No. 6278701 B1).

- With respect to claim 1, Zhang teaches a method and apparatus for providing computer network, which interpreted as a user in a data communications network, which comprises: obtaining a user service profile for the user in response to a user log-in attempt to a service selection gateway (Fig. 2A shows steps 34); routing all packets originated by the user through the SSG during the session and passing the packets on to the data communications network (col. 3, lines 41-44). Zhang fails to teach setting the QoS bits accordance with the QoS level for the user. Ayyagari teaches setting the QoS bits accordance with the QoS level for the user (e.g. col. 3, lines 19-22) for guarantee the quality of service and connection to the user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use the QoS method in Ayyagari's invention into Zhang for protecting the connection of the user in network and guarantee for the quality of service with the user.

- With respect to claims 2 & 4, Zhang fails to teach wherein all packets transmitted by the user have QoS bits set in accordance with the QoS level for the user. Ayyagari fails to explicitly

teach the QoS bits in the packets accordance with the QoS level it is inherently to know the QoS bits, which is in the packet for controlling the connection of the user and indicating the quality of service for the user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use the QoS bits set in accordance with the QoS level for controlling and indicating the service for the user.

- With respect to claim 3, Zhang teaches a method and apparatus for providing computer network, which interpreted as a method of setting a user in a data communications network, which comprises: initiating a request to an authentication, authorization and accounting server in response to the user's attempt to log-in (e.g. Fig. 2A show the block 38); receiving, in response to the request, a user service profile corresponding to the user (e.g. the user profile is stored in the memory such as Fig. 2 shows). Zhang fails to teach the user service profile including a Quality of Service field and using the Quality of Service field to set QoS bits within packets transmitted by the user. Ayyagari teaches the QoS and the setting QoS bits within in the packet (e.g. col. 3, lines 19-22) for protection error and guarantee of connection for user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use the method of QoS in Ayyagari's invention into Zhang for guarantee the connection of user to the network and protection the error.

- With respect to claim 5, Zhang teaches a method and apparatus for providing computer network, which is interpreted as a method of setting a user in a data communications network, which comprises: at a service selection gateway (block 20 in Fig. 1) to which the user is in communication a request from the user to communicate (e.g. step 32 in Fig. 2A); and transmitting the packets belonging to the at least one packet flow to the data communications

network (col. 3, lines 41-44). Zhang fails to teach setting the QoS bits and assigning a particular Quality of Service level to at least one packet flow transmitted by the user within packets belonging to the at least one packet flow received at the service selection gateway in accordance with the Quality of Service level. Ayyagari teaches setting the QoS bits (e.g. col. 3, lines 19-22) and assigning a particular Quality of Service level (e.g. col. 3, lines 33-36) to at least one packet flow transmitted by the user within packets belonging to the at least one packet flow received at the service selection gateway in accordance with the Quality of Service level for controlling protecting in the communication and guarantee the service for the user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use the method of QoS in Ayyagari's invention into Zhang for guarantee the connection of user to the network and protection the error.

- With respect to claims 6, & 15-16, Zhang discloses wherein all the packets of the at least one packet flow in an IP packet (e.g. the packet in Zhang's invention).

- With respect to claims 7, & 17-18, Zhang and Ayyagari fail to explicitly teach wherein the QoS bits are the precedence bits within the ToS/Differentiated Services field of the IP packets, but it is inherently to a person of ordinary skill in the art at the time of the invention was made to know the QoS bits are in the ToS/Differentiated Services field of the IP packet.

- With respect to claim 8, Zhang teaches communicating between the service selection gateway and an AAA server the request (e.g. Fig. 2 shows the communication between the SSG and AAA).

- With respect to claims 12 & 19, Zhang discloses an apparatus communications system, which comprises: a service selection gateway (SSG in Fig. 1) in communication with the user

(block 12 in Fig. 1), the SSG also in communication with an authentication, authorization and accounting (AAA in Fig. 1) server, the SSG receiving a user service profile from the AAA server in response to an attempt to log-in by the user (e.g. block 40 in Fig. 2A); and a packet modifier associated with the SSG (e.g. the packets is modified at SSG). Zhang fails to teach setting the QoS bits of packets. Ayyagari teaches setting the QoS bits for the user (e.g. col. 3, lines 19-22) for guarantee the quality of service and connection to the user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use the QoS method in Ayyagari's invention into Zhang for protecting the connection of the user in network and guarantee for the quality of service with the user.

- With respect to claims 13, 14, & 21, Zhang discloses wherein all packets transmitted by the user to the data communications network via the SSG are modified (e.g. Fig. 1 shows the transmitting by the user to the data communications network).

- With respect to claims 20 & 22, Zhang fails to teach wherein the QoS bit field is set to a value specified in the QoS request. Ayyagari teaches the QoS bit is set to the values specified in the QoS request (e.g. col. 3, lines 19-22) for guarantee of communication and protection the quality of connection in the data network. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use the QoS bits with setting to the value specified in the QoS request in the packet for protecting and guaranteeing the communication during of congestion.

Allowable Subject Matter

3. Claims 9-11, & 23-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8, & 12-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H TRAN whose telephone number is (703) 308-7471. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WELLINGTON CHIN can be reached on (703) 305-4366. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9314.

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
December 10, 2001

Ricky Ngo
Primary Examiner
Art Unit 2664